

# Characterizing Late Pleistocene and Holocene Stone Artefact Assemblages from Puritjarra Rock Shelter: A Long Sequence from the Australian Desert

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**ABSTRACT.** This paper presents the first detailed study of a large assemblage of late Pleistocene artefacts from the central desert. Analysis of the lithics shows that Puritjarra rock shelter was used more intensively over time, with significant shifts in the character of occupation at 18,000, 7,500 and 800 B.P., reflecting significant re-organization of activities across the landscape. The same generalized flake and core technology appears to have been used for over 30 millennia with only limited change in artefact typology over this period.

SMITH, M.A., 2006. Characterizing Late Pleistocene and Holocene stone artefact assemblages from Puritjarra rock shelter: a long sequence from the Australian Desert. *Records of the Australian Museum* 58(3): 371–410.

Excavations at Puritjarra rock shelter provide a rare opportunity to examine an assemblage of late Pleistocene artefacts from central Australia, dating as early as c. 32,000 B.P. This study presents a quantitative analysis of the flaked stone artefacts at Puritjarra, comparing the Pleistocene and Holocene assemblages at this site. It is also the first detailed study of an excavated assemblage of lithics in the Australian arid zone since research by R.A. Gould on the Holocene artefact assemblages at Puntutjarpa (Gould, 1977) and Intirtekwerle (James Range East) (Gould, 1978), and R.J. Lampert at Hawker Lagoon (Lampert & Hughes, 1988). However, it differs from these earlier studies in making the history of site use a focus of analysis, rather than stone tool systematics.

This approach reflects current trends in lithic research. Over the last thirty years, interpretation of flaked stone artefact assemblages in Australia has swung from stone tool systematics to a more systemic perspective on stone artefacts (Holdaway & Stern, 2004—see also Cundy, 1990; Hiscock & Allen, 2000; Hiscock & Attenbrow, 2003; Holdaway,

2004). Ethno-archaeological studies involving the last generation of Aboriginal people to rely on stone artefacts have been very influential in this shift in perspective (Cane, 1984, 1992; Gould, 1968; Gould *et al.*, 1971; Hayden, 1977, 1979; O'Connell, 1977). But Australian research also reflects the impact of international trends in lithic analysis, stimulated by the work of L.R. Binford on site use, mobility patterning and organizational variability amongst foraging peoples (Binford, 1982). Recent research in the Australian arid zone emphasizes the effects of residential mobility, access to stone, the flaking properties of different raw materials, and changes in intensity of occupation as key factors in structuring the archaeological record (Barton, 2003; Veth, 1993).

## Research problems in central Australia

The need for an extended application of this approach, to excavated assemblages of flaked stone artefacts from the western and central desert, has grown steadily since the prehistory of these regions was mapped out in a series of